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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,082	08/17/2001	Yasushige Nakamura	011040	2870

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EXAMINER
RODEE, CHRISTOPHER D

ART UNIT	PAPER NUMBER
1756	

DATE MAILED: 01/27/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Applicati n No.	Applicant(s)	
	09/931,082	NAKAMURA ET AL.	
	Examiner	Art Unit	
	Christopher D RoDee	1756	

-- Th MAILING DATE of this communication appears on th cov r she t with the correspond nc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 January 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) *7-14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

Applicant's election of claims 1-6 (Group I) in Paper No. 5 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Response to Amendment

The new copy of claim 1 includes a heavy bordered box around the formula (I). This change is not noted in the mark-up copy of the claim and may have been entered inadvertently. Applicants are asked to remove the box around the formula (I) in response to the Office action. If there is any significance to the box applicants are asked to clarify.

The amendment to claim 1 that specifies the colorant and the infrared absorbing compound as not being the same is seen as having basis in the specification at page 10, lines 8-12. This passage states, "it is essential to use at least a calixarene compound and an infrared absorbing compound in combination with the binder resin and the colorant, in the electrophotographic color toner of the present invention." Clearly the infrared absorbing compound is used in combination with the colorant. If the compounds are used in combination, they cannot be the same.

The previously applied rejections under § 112, second paragraph, are withdrawn based on the clarifying amendments except for the rejection to claim 6, discussed below. The previously applied rejection over Soeda in view of a supporting reference is withdrawn based on the amendments.

Claim Rejections - 35 USC § 112

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In response to a rejection under this section in the last Office action, applicants have amended the claim so that it now states, "the color toner is fixed by an electrographic imaging process employing a photofixing system." The claim remains indefinite because it is unclear how fixing the color toner in an electrographic imaging process using a photofixing system limits the toner of claim 1, which is already stated as being a photofixing color imaging toner. Clarification is requested.

Claim Rejections - 35 USC § 103

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kushino *et al.* in US Patent 6,136,488 in view of Yamanaka *et al.* in US Patent 5,049,467.

This rejection was set forth in the last Office action. The claims have been amended to specify that the toner is a "photofixing" color imaging toner and that the the colorant and the infrared absorbing compound as not the same.

Kushino discloses a flash fixing toner as discussed in the last Office action. Additionally, this toner is disclosed as being fixed by a xenon flash lamp with an energy of 1.6 - 3 J/cm^2 (col. 25, l. 1-2). This limitation is met by the art as previously applied. Further, the colorant and the IR absorbing agent in Kushino are not the same compounds, as seen in the Examples. The art teaches each of the components claimed for the photofixing color imaging toner and provides motivation for the combination as given in the last Office action. Specifically, the artisan would have found it obvious to prepare Kushino's toner with the exemplified calixarene of Yamanaka

because Kushino specifically calls for colorless charge control agents and Yamanaka discloses specific colorless calixarenes that serve this function.

In response to this rejection applicants rely on the background of the invention (response p. 5). The specification states that the colorant and the infrared absorbing compound react with each other during heating when manufacturing the toner. The coloring power and the infrared absorbing ability of the toner is degraded. Additionally, one would not have used the calixarene of Yamanaka in the toner of Kushino because Yamanaka does not disclose the calixarene for photofixing toners.

The Examiner has carefully reviewed the instant specification, particularly the cited passage, the references, and the claims as amended. Initially, the Examiner must point out that the instant claims are directed to the toner and not to the method of making the toner. The fact that certain prior art combinations of IR absorbing agents and charge control agents may react with each when heating does not lessen the obviousness of combining the charge control agent of Yamanaka with the other toner components of Kushino to make an effective toner. There is no indication in the art that calixarenes will react with IR absorbing agents.

Kushino discusses alternative methods of making toner where heating does not take place. At column 20, lines 41-49 the reference discusses a method of making the flash fixing toner as,

> "a suspension polymerization method which obtains toner particles by preparing a polymerizing composition by compounding a monomer capable of forming a binding resin by polymerization with a coloring agent, an infrared absorbent, etc., suspending the polymerizing composition in an aqueous medium, and then polymerizing the monomer."

Also see col. 22, l. 16-54 & Examples 7-9 where suspension and emulsion polymerization are conducted.

Even if one of skill in the art did recognize a problem of using a charge control agent, such as a calixarene, and an infrared absorbing compound when preparing toner by a heating process, the artisan would not expect any such degradation in color or infrared absorbing ability in the toner produced by the alternative methods.

Although the secondary reference does not disclose the calixarene compound as being effective in a photofixing toner, this does not negate the obviousness of combining the references. The charge control agent is used in both Kushino and Yamanaka for the disclosed and expected function of providing necessary triboelectric charge to the toner. This property is important when the electrostatic latent image on the surface of an imaging member is developed. The toner fixing step occurs after the image has been developed (see Kushino col. 39, l. 7-18). There is little or no effect of the charge control agent during the fixing step because the toner has already been attracted to the imaging member. Thus, the fact that Yamanaka's charge control agent is not disclosed in a photofixing process is not material to the expected functions and properties of the charge control agent and is not material to the photofixing step.

The rejection is still seen as proper and is maintained.

Claims 1, 2, and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishimaru *et al.* in US Publication 2002/0098432 in view of Yamanaka *et al.* in US Patent 5,049,467.

This rejection was set forth in the last Office action. Ishimaru discloses an optical fixing toner comprising a binder resin, a quinacridones pigment, a calixarene charge control agent, and an IR absorbing agent. The quinacridone and IR absorbing agent are not the same and the reference specifically disclosed photofixing. The reference is applicable to the claims under consideration for the reasons of record.

In the traversal of this rejection applicants appear to invoke the provisions of § 103(c) based on common ownership of the instant application and the reference. However, applicants have not made the proper statement required. The statement on response p. 6 does not clearly state that the instant application and the publication were commonly owned at the time the instant invention was made. As discussed in MPEP 706.02(l)(2), applicants should state in "a clear and conspicuous manner" that "Application X and Patent A were, at the time the invention of Application X was made, owned by Company Z." A new statement is suggested that follows the language discussed.

Lacking any other ground of traversal, the rejection is maintained.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher D RoDee whose telephone number is 703 308-2465. The examiner can normally be reached on most weekdays from 6 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 703 308-2464. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9310 for regular communications and 703 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0661.

cdr
January 24, 2003

CHRISTOPHER RODEE
PRIMARY EXAMINER